

IN THE SPECIFICATION:

The paragraph beginning at page 1, line 12 has been amended as follows:

--Multimedia messaging is a modern and prominent service used in mobile terminals. The multimedia messaging is part of the evolution of mobile communication, wherein voice-based calls and text-based short messages are advanced into messaging of several different media types. Use of multimedia messages enables a variety of different services. The services are continuously developing due to different electronic applications. The multimedia capable terminals and services are gaining speed with the current introduction of camera phones in the market.--

The paragraph beginning at page 1, line 22 has been amended as follows:

--Although the electronic communication between terminals is effective, combining it with traditional communication results in significant market benefits. As one example a postcard service can be presented, where the user is capable of ordering ~~an~~ a postcard via e.g. SMS (Short Message Service), WAP (Wireless Application Protocol), Internet from a service supplier, wherein a paper copy of said postcard is delivered to the recipient. One of the new services is a postcard service where the user sends ~~an~~ a message to a service supplier via MMS (Multimedia Messaging Service) where in the service the message is printed as physical postcard and delivered to the recipient. The content of the message can then be e.g. a self-photographed image.--

The paragraph beginning at page 1, line 34 and ending at page 2, line 12 has been amended as follows:

--The presentation of the multimedia message is controlled by SMIL (Synchronized Multimedia Integration Language), which is a mark-up language akin to HTML (Hyper-text Mark-up Language) and XML (Extensible Mark-up Language). SMIL presentation is a mandatory component of the multimedia messages. The SMIL is

used for programming even complex multimedia presentations to be composed and presented to the end user. SMIL defines a structure for the presentation comprising a multimedia files, which can be text, sound, images, video, animation, etc. or a combination thereof. Layout of a SMIL-presentation is divided into different regions, each of which can ~~be contained of~~ contain different multimedia content. The structure resembles that of a slide presentation application or similar presentations. The SMIL presentations contain spatial aspects (e.g. where an image is located on the display), temporal aspects (e.g. how long an image is visible on its location) and interaction aspects (e.g. by actuation of which key an image becomes visible).--

The paragraph beginning at page 3, line 12 has been amended as follows:

--The printable output can be formed by defining a temporal aspect of said at least one event, whereby said printable output comprising said event, is formed based on that definition. This means that the electronic presentation is analyzed in time, whereby as many events as there are (multimedia) objects in the message are analyzed.--

The paragraph beginning at page 3, line 18 has been amended as follows:

--~~Additional~~ An additional feature of the current invention is to study a spatial aspect of each event by defining the location of the event in relation to the layout of the presentation and then combine events into one output, if their layout locations differ from another, and otherwise keep them on separate outputs. The events locating substantially on the same layout location are further studied by their temporal aspect, and that event, which is temporally closer - than those other events sharing the same layout location - to the combined events is also added to the combined output. Sometimes, if the location of the objects matches, but the space required by the objects differs, wherein the objects are partially overlapping, further study may be done. In this case the temporal study, as mentioned above, can be done, wherein the temporally closer object is combined. It is also possible to

combine the temporally further but bigger object.--

The paragraph beginning at page 4, line 13 has been amended as follows:

--The description below mentions electronic presentation as an embodiment of the invention. Electronic presentation can be a multimedia message or other multimedia presentation being processed in a mobile device or in other data processing device and being composed of different multimedia elements. The electronic presentation is not limited to media types (image, text, video, audio).--

The paragraph beginning at page 4, line 20 has been amended as follows:

--~~Electronic~~ An electronic presentation such as multimedia messages (e.g. SMIL presentation) with spatial, temporal and interaction aspects may not create same presentation when printed. The way ~~how~~ in which spatial aspects in the presentations are converted to printed surface may also be confusing to the end-user. However having a set of clear rules on how a presentation is rendered to a printed page enables manufacturers to optimize products and guide end-users especially in ~~ease~~ cases when messages are created specifically for printing services. The current invention is for presenting these rules.

The paragraph beginning at page 4, line 30 has been amended as follows:

--The invention can also be utilized when considering interoperability of the multimedia messages of different versions. This is ~~more~~ further discussed at the end of the description below.--

The paragraph beginning at page 4, line 36 and ending at page 5, line 23 has been amended as follows:

--A better understanding of the invention may be obtained from the following considerations taken in conjunction with the accompanying drawings, which are not meant to restrict the scope of the invention in any way. Further objects and advantages of the invention are also considered in the description. The invention

itself is defined with particularity in the claims.

- Fig. 1 illustrates the principle of the current invention,
- Fig. 2 illustrates a simplified structure of an multimedia message,
~~consisting of~~ comprising regions,
- Fig. 3 illustrates a time axis formed of the events of the message,
- Fig. 4a-d illustrates temporal events of the message figuratively and in
principle,
- Fig. 5a-b illustrates ~~an example of very principled~~ flow charts of embodiments
of the method according to the invention,
- Fig. 6 illustrates ~~an example of very principled~~ a device according to the
invention, and
- Fig. 7 illustrates ~~an example of very principled ana~~ a medium printed from
the electronic device.--

The paragraph beginning at page 5, line 27 and ending at page 6, line 2 has been amended as follows:

--This invention is primarily addressed to the electronic presentation, and to the mark-up language used in such. The description discusses ~~about~~ multimedia messages as examples of the electronic presentation, but it should be noticed that multimedia messaging (MMS) is a way of transferring presentations between devices wirelessly, and the invention is not limited to that transfer method. Printable outputs of electronic messages can be formed in a mobile device but also in some other data processing device, and they can be printed though a wireless network, through a cable, through a personal computer or through any other link to the printing device. It should be also noticed, that outputs can temporally be also printed only to file stored in some memory means.--

The paragraph beginning at page 6, line 4 has been amended as follows:

--An example of mark-up language used in multimedia messaging (e.g. 3GPP) is

SMIL 2.0 , but it should be noticed that the mark-up language can be newer versions of SMIL or some other mark-up language, that has similar features ~~than~~ as those discussed here. Figure 2 illustrates the basic structure of an electronic message, which is similar to the basic structure of SMIL presentation. Similar to the HTML or XML, SMIL uses tags where the information of the presentation is set. The <layout> element consists information about the presentation and presents <root layout> which defines how the presentation is ~~showed~~ shown on the display and what is the size of the layout is. The layout locations, as regions (shown in figure 2) R1 – R3 define where in the root the presentation objects actually occur. The description of the region is made by attributes of which <id> is the identification of the region, <title> gives information about the region, <left>, <top>, <width> and <height> define the location of the region compared to the root. ~~It is obvious~~ will be evident to those of skill in the art that such a presentation is not limited to three regions R1 – R3, as well as the invention is not limited to three regions R1 – R3. Above-mentioned regions R1 – R3 are for the sake of ~~clarifying~~ illustration and not limitation.--

The paragraph beginning at page 7, line 1 has been amended as follows:
--At first when forming a printable output from the electronic presentation according to the invention, the irrelevant, those that cannot be printed, objects e.g. interaction elements as well as those relevant multimedia elements which are rendered as a result of interaction are removed from the presentation. Other multimedia elements (e.g. sound media) can also be removed, if they do not have corresponding printable version or if they are just not wanted to be left in. But it should be noticed that e.g. sound file can be converted into a text- or an image-file, especially when the sound file is known sound such as for example ring.wav or cuckoo.wav or the tag has information of the sound (e.g. boo.wav ALT="Scared?"). The sound files can be replaced e.g. by defining the conditions for it. The condition can, for example, be defined by a switch-sentence:

<switch>

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<audio src="cuckoo.wav" device="mobile" />  
  
</switch>
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where it is first checked whether the device supports audio-files. If the device is a printer that does not support audio, the element is changed into a picture of bird.--

The paragraph beginning at page 7, line 24 has been amended as follows:

--Continuous or streamed media (e.g. animation or video) can be converted to non-continuous media when applicable, or removed. The conversion can be made for example by choosing one (first, last or one between) video frame and converting it to a still image of same size.--

The paragraph beginning at page 7, line 24 and ending at page 8, line 10 has been amended as follows:

--When the presentation is “cleaned”, temporal aspects of the presentation are studied for example by means of a time axis. One example of the time axis is shown in Figure 3. Here the time-axis represents events of the message in time t . At the beginning ($t = 1$) only the first image IM1 is displayed in the message. Next ($t = 2$), the second image IM2 is displayed in the same region as the first image and the first image IM1 is not shown. After this ($t = 3$), the third image IM3 is displayed with the second image IM2 and then ($t = 4$) the fourth image IM4 is displayed with the third IM3 and the second image IM2, because they all IM3, IM4, IM2 use different regions. Figures 4a – 4d represent the phases of the displays. Each of the figure 4a – 4d show on the left side from the viewer a figurative display and on the right side from the viewer a display in principle. A first image IM1 is displayed in region R1 (3a), a second image IM2 is displayed also in region R1 (3b) and the first image is not shown anymore. A third image IM3 is displayed in region R2 (3c) and a fourth image IM4 is displayed in region R3 (3d). Each temporal event (appearance of an object) on time axis creates a new printable output. In other words each formed printable output consists of one